

1-17. (CANCELED)

18. (NEW) A power-split transmission comprising:

a variator (1) being constructed as one of a toroid variator, a friction wheel variator, a band variator, a chain variator, a tapered ring transmission and a continuous hydrostatic transmission;

a variator output transmission (2) including a first planetary gearset (9);
and

an additional planetary gearset (3) which connected in a direction of a flux of force in front of the variator, serves as a distribution transmission and connected in the direction of the flux of force behind the variator, serves as a summation transmission for the power- splits,

the variator output transmission (2), the variator (1) and the additional planetary gearset (3) are arranged coaxially, and a spatial arrangement of the variator output transmission (2), the variator (1) and the planetary gearset (3) in an output direction is indicated by one of a following schemata:

the variator (1) -the variator output transmission (2) -the additional planetary gearset (3);

the variator (1) -the additional planetary gearset (3) -the variator output transmission (2);

the additional planetary gearset (3) -the variator (1) -the variator output transmission (2);

the additional planetary gearset (3) -the variator output transmission (2) -the variator (1);

the variator output transmission (2) -the additional planetary gearset (3) -the variator (1); and

the variator output transmission (2) -the variator (1) -the additional planetary gearset (3).

19. (NEW) The power-split transmission according to claim 18, wherein the variator (1) is as a reversing toroid variator having a first torus disk pair (4), a second torus disk pair (5), and the spatial arrangement of the variator output transmission (2),

the first torus disk pair (4), the second torus disk pair (5) and the additional planetary gearset (3) in the output direction is indicated by one of the following schemata:

the first disk pair (4) -the variator output transmission (2) -the second disk pair (5) -the additional planetary gearset (3);

the first disk pair (4) -the additional planetary gearset (3) -the second disk pair (5) -the variator output transmission (2);

the variator output transmission (2) -the first disk pair (4) -the additional planetary gearset (3) -the second disk pair (5); and

the additional planetary gearset (3) -the first disk pair (4) -the variator output transmission (2) -the second disk pair (5).

20. (NEW) A power-split transmission comprising;

a variator (1) constructed as one of a toroid variator, a friction wheel variator, a band variator, a chain variator, a tapered ring transmission and a continuous hydrostatic transmission,

a planetary gearset (3), connected in a direction of a flux of force before the variator, serves as a distribution transmission, and, connected in a direction of a flux of force behind the variator, serves as a summation transmission for power-splits, in which a countershaft (6) arranged axially parallel and axially staggered in relation to the variator is provided, through which power of the variator is conducted to output of the transmission using one or more of a spur gear step and at least one of a first spur gear step (7) and a second spur gear step (8),

a spatial arrangement of the one of spur gear steps, the belt, the first spur gear step (7) and the second spur gear step (8), the variator (1) and the additional planetary gearset (3) in the output direction is indicated by one of the following schemata:

the variator (1) -the first spur gear step (7) -the second spur gear step (8) -the additional planetary gearset (3);

the variator (1) -the first spur gear step (7) -the additional planetary gearset (3) -the second spur gear step (8); and

the additional planetary gearset (3) -the variator (1) -the first spur gear step (7) -the second spur gear step (8).

21. (NEW) The power-split transmission according to claim 20, wherein the variator (1) is a reversing toroid variator having a first torus disk pair (4) and a second disk pair (5), the spatial arrangement of the one of the spur gear steps, the belt, and the first and second spur gear steps (7, 8), the variator (1) and the additional planetary gearset (3) in the output direction being indicated by one of the following schemata:

the first disk pair (4) -the first spur gear step (7) -the second disk pair (5) -the third spur gear step (8) -the additional planetary gearset (3);

the additional planetary gearset (3) -the first spur gear step (7) -the second disk pair (4) -the second spur gear step (8) -the second disk pair (5); and

the first disk pair (4) -the first spur gear step (7) -the second disk pair (5) -the additional planetary gearset (3) -the second spur gear step (8).

22. (NEW) The power-split transmission according to claim 18, wherein the power-split transmission is a geared neutral transmission.

23. (NEW) The power-split transmission according to claim 18, wherein the power-split transmission is one of a single region and a two region transmission.

24. (NEW) The power-split transmission according to claim 18, wherein the first and second planetary gearsets (3, 9) are one of a plus and a minus planetary gearsets.

25. (NEW) The power-split transmission according to claim 24, wherein a gear is provided in overdrive, in which no power flows through the variator (1, 4, 5).

26. (NEW) The power-split transmission according to claim 25, wherein the gear is one of a direct gear and another gear such that a further reduction is attained using one of planetary stages, spur gear steps, a belt and first and second spur gear steps (7, 8).

27. (NEW) The power-split transmission according to claim 25, wherein an additional shifting element (KD) is provided for engaging the gear in which no power flows through the variator (1, 4, 5).

28. (NEW) The power-split transmission according to claim 25, wherein shifting elements (K1, K2) engage for engaging individual ranges to engaging a gear in which no power flows over the variator (1, 4, 5) in two range transmissions.

29. (NEW) The power-split transmission according to claim 27, including a friction wheel variator (1) with two variator disk pairs (4, 5), wherein the variator output

transmission (2), includes one planetary gearset (9), arranged between the two variator disk pairs (4, 5) and coaxially thereto, wherein the additional planetary gearset (3), serving as a summation transmission, is arranged coaxially to the planetary gearset (9), such that a sun wheel (10) of the planetary gearset (9) of the variator output transmission (2) can be connected with the variator output on a drive side via a clutch (K1) and can be coupled to a housing (14) via a brake (KD), a bar (13) of the planetary gearset (9) is connected on the drive side with a drive shaft (12) and on the output side with the variator (1) and another bar (18) of the additional planetary gearset (3), and a gear ring (11) of the planetary gearset (9) is connected on an output side with a sun wheel (15) of the additional planetary gearset (3), and a gear ring (16) of the additional planetary gearset (3) is connected with an output shaft (17).

30. (NEW) The power split transmission according to claim 27, including a friction wheel variator (1) with two variator disk pairs (4, 5), the variator output transmission (2) and the additional planetary gearset (3) are arranged coaxially in relation to the variator (1) and in the direction of an output shaft (17) behind the variator (1), a sun wheel (10) of the planetary gearset (9) of the variator output transmission (2) is connected with the variator output on the drive side via a clutch (K1) and can be coupled to a housing (14) via a brake (KD), a bar (13) of the planetary gearset (9) is connected with a drive shaft (12) on the drive side and on the output side with the variator (1), and a gear ring (11) of the planetary gearset (9) is connected on the output side to a sun wheel (15) of the additional planetary gearset (3), a gear ring (16) of the additional planetary gearset (3) is connected with the output shaft (17) and a bar (18) of the additional planetary gearset (3) is connected with the drive shaft (12).

31. (NEW) The power-split transmission according to claim 29, wherein shifting takes place by engaging the clutch (K1) into a driving region and an overdrive gear is engaged by engaging the brake (KD).

32. (NEW) The power-split transmission according to claim 28, wherein power-split transmission further comprises a single-direction friction wheel variator (1), behind which the variator output transmission (2) and the additional planetary gearset (3), which serves as a summation transmission, are arranged coaxially in a

direction of an output shaft (17), a sun wheel (10) of the planetary gearset (9) of the variator output transmission (2) is connected on a drive side with a variator output, a gear ring (11) of the planetary gearset (9) is connected on an output side with a sun wheel (15) of the additional planetary gearset (3), a bar (13) of the planetary gearset (9) is coupled to a housing (14), a bar (18) of the additional planetary gearset (3) is coupled to the housing (14) via a brake (KR) and can be connected on the drive side with a drive shaft (12) via a second clutch (K2), a gear ring (16) of the additional planetary gearset (3) is connected with the output shaft (17) and is connected with the drive shaft (12) via a first clutch (K1) and the second clutch (K2), and the bar (18) of the additional planetary gearset (3) is connected with the gear ring (16) via the first clutch (K1).

33. (NEW) The power-split transmission according to claim 28, wherein the variator is a friction wheel variator (1) with two variator disk pairs (4, 5), and a countershaft (6) arranged axially parallel in relation to the variator (1) is provided, via which power of the variator (1) is conducted to output of the transmission using one of a belt or sprocket wheel drive (7), arranged between the two variator disks (4, 5), and a spur gear step (8), the additional planetary gearset (3) serving as a summation transmission is arranged coaxially in relation to the variator (1), a sun wheel (15) of the additional planetary gearset (3) is connected with an output shaft (17), and a bar (18) of the additional planetary gearset (3) is connected on a drive side with an output of the variator (1) via the belt drive (7), the countershaft (6) and the belt drive (7), and a gear ring (16) of the additional planetary gearset (3) are coupled to a housing (14) via a brake (KR), wherein the bar (18) can be connected on the drive side with the spur gear step (8) via a first clutch (K1), and a second clutch (K2) is arranged between the variator (1) and the additional planetary gearset (3) which connects the gear ring (16) with a drive shaft (12).

34. (NEW) The power-split transmission according to claim 32, wherein a first driving region results by engaging the first clutch (K1), a second driving region with power-split by engaging the second clutch (K2), a reverse gear by engaging the brake (KR) and the overdrive gear by engaging the first clutch (K1) and the second clutch (K2).